

## **ABSTRACT**

An anti fraud card system consists of two physically distinct components: The first is a card having a built-in battery; an infrared receiver; a processor; a non-volatile memory; and a strip to receive a signal from the processor which is captured by a card swipe machine. The second is a compact, easily disguisable transmitter which comprises a processor; a battery; a non-volatile memory; and an infrared transmitter. Besides the two above mentioned physical components, a third important component is the user who inputs a secret sequence into the transmitter so that the transmitter in fact transmits two codes, one contained in memory inside the transmitter and the other in the memory of the user which inputs a memorized sequence using buttons on the transmitter. These two codes combine with a third code contained in the memory of the card. The user also controls the duration that the signal from the transmitter transmits over to the card by the duration he depresses the transmit button.